



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

JUL 29 2011

REPLY TO THE ATTENTION OF:

E-19J

Norman Stoner, P.E.  
Division Administrator  
Federal Highway Administration  
3250 Executive Park Drive  
Springfield, Illinois 62703

Re: **Comments on the Draft Environmental Impact Statement  
for US 30 from Fulton to Rock Falls, Whiteside County, IL, CEQ# 20110162**

Dear Mr. Stoner:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency has reviewed the proposed Draft Environmental Impact Statement (DEIS) for US 30 from the IL 136 intersection at Fulton to the IL 40 intersection in Rock Falls, in Whiteside County, Illinois. This is at the northwestern edge of Illinois near the Mississippi River, just north of the Quad Cities and running east-west parallel to the I-80 interstate highway. The project proposes to improve traffic capacity, reduce congestion, improve safety, anticipate increased travel demands, and bring this segment of US 30 into system continuity with segments further west in Iowa.

EPA has participated briefly in the NEPA process for this project, which includes providing early scoping comments on May 29, 2007 and concurrence with Purpose and Need on September 4, 2008, both at merged NEPA / Clean Water Act Section 404 (NEPA / 404) meetings. This project was subsequently withdrawn from the merged NEPA / 404 process in July 2010 because wetland impacts for all alternatives being considered were reduced to a level not requiring a 404 Wetland Permit. On November 30, 2010, we agreed to be a Cooperating Agency for this project.

Two build alternatives are presented in the DEIS as the result of much public involvement, but a preferred alternative is not selected. Both build alternatives would utilize a four lane divided expressway configuration, as opposed to a freeway design which would limit local accessibility. The difference between the two proposals is that one bypasses the City of Morrison on the north side and the other would bypass the city on the south side. Other alternatives considered but rejected as not meeting Purpose and Need included the No Build Alternative, several Transportation Demand Management possibilities, and a Transportation System Management Alternative.

We have reviewed the DEIS and in keeping with our responsibilities under NEPA, give the document a rating of **EC-2, Environmental Concerns - insufficient information**, see the attached Summary of Rating Definitions for clarification. The following sections outline our observations regarding the proposed Purpose and Need, Alternatives, Environmental Impacts, and Proposed Mitigation of Unavoidable Impacts. Some of these points are discussed in greater detail in the attachment: Concerns Regarding the DEIS Proposed Project for US 30 in Whiteside County, Illinois.

## PURPOSE AND NEED

We previously concurred with the Purpose and Need (P&N) statement because it adequately states the conditions to be addressed by this project. However, we note three parts of the P&N discussion are significant factors contributing to existing conditions which should be addressed by this project's alternatives, but are not. We will discuss these further under Alternatives and in the attached discussion.

## ALTERNATIVES

It is not clear how any bypass with only an east-west consideration, such as the two retained alternatives, will fully address the traffic congestion in Morrison caused by the north-south IL 78 truck traffic. We recommend future NEPA documents consider an alternative that includes a Morrison west side bypass extending from IL 78 on the north side to IL 78 south of the city. A portion of the dismissed Alternative A-I accomplished this, connecting IL 78 north to south. This north-south portion of A-I could either be incorporated as part of a full southern bypass alternative or as a spur bypass on just the western side of the city.

One safety issue noted in the Purpose and Need discussion, Chapter 1 page 7 and Table 1-4, is that eight roads intersect with US 30 at less than the State Design Standard of 75 to 90 degree angles. It is not clear that the proposed alternatives address these conditions or how they will be addressed by this project. The future NEPA documents should clarify how this proposal meets this component of the P&N.

The north-south traffic on the west side of Sterling - Rock Falls creates safety and congestion problems specifically at three of the above non-standard intersections. We recommend consideration of an alternative that consolidates this north-south traffic, perhaps on a westside collector, and eliminates these non-standard intersections.

## ENVIRONMENTAL IMPACTS

### >>AIR QUALITY

The DEIS correctly presents that this project location does not require conformity with a State Implementation Plan for Air Quality. Although modeling Mobile Source Air Toxics (MSATs) is

a developing field of science, we commend the qualitative assessment of these potential impacts in this DEIS for alternative impacts. We recommend that Illinois Department of Transportation (IDOT) commit to a construction diesel emissions reduction plan for this project to reduce and mitigate the known construction emissions to the degree feasible. Although not required by EPA regulations, similar projects have included commitments to some or all of the following reduction methods.

Options to consider in a diesel emissions reduction plan include:

- (a) retrofitting off-road construction equipment including repower or engine upgrades
- (b) using ultra-low-sulfur fuels for all equipment
- (c) limiting the age of on-road vehicles in construction projects to 1998 and newer and 1996 and newer for off-road equipment
- (d) diesel particulate traps and oxidation catalysts
- (e) using existing power sources or clean fuel generators rather than temporary power generators
- (f) encouraging the use of off-road equipment that meets the Tier 3 standards.

#### >>STREAMS AND FLOODPLAINS

Although a longitudinal transportation project by its nature fragments open space and severs habitat connections, they can be designed and constructed with some accommodations for connectivity. One area for such consideration is at water and floodplain crossings. Fourteen streams could potentially be crossed by one or both of the proposed alternatives (DEIS Table 3-39). The associated floodplains (DEIS Table 3-46) to seven of these streams widens their potential natural habitat area. The DEIS notes that only the Rock River has an associated floodway designation which must be kept open to accommodate a possible 100-year flood event. We recommend that to provide habitat connectivity and promote the recovery of natural areas within the project area, the stream and floodplain crossings be widened. Most of the stream banks pictured in the DEIS have steep sides and would be subject to erosion. Modification of such stream banks by creating a stepped plateau provides a more stable bank and incorporates better flood control than narrow buttressed channels. To create such a stepped bank, the original river bed is retained up to the high water level. At that height, the bank is stepped back a distance of 10 to 50 feet, creating a local floodplain. This plateau is planted with native species having deep root systems which stabilizes the soil when flooded. By using a stepped bank construction at stream crossings the flood control function is expanded and wildlife connectivity is provided on the created plateau. This design also reduces or eliminates scouring.

We commend IDOT for alignment adjustments made to reduce impacts to streams and floodplains. We note that design features are routinely being planned for a 50-year flood level. In addition to the above stepped bank design, we recommend these floodplain crossings be redesigned taking forecast climate change and recent flooding history into consideration. We believe these considerations may warrant using a 100-year or even 500-year flood level reference in designing protection and bridging structures.

We recognize the state's best management practices for erosion control measures, but recommend consideration be given to utilizing compost blankets, berms, and socks at points where rapid regrowth cover and long term utility are appropriate . Please refer to <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=119&minmeasure=4> and related adjacent EPA websites.

#### MITIGATION of UNAVOIDABLE IMPACTS

Many other impacts are appropriately addressed in the DEIS, including mitigation proposals. Table 2-8 is very useful in identifying the possible impacts of the project build alternatives. We recommend that a similar summary table be included in future NEPA documents, clarifying each impact within categories, and provide sufficient information for each specific impact and associated mitigation to be identified and understood as to location, nature of what is impacted (i.e. size, quality, description, etc.), and the specifics concerning mitigation for that impact. Where appropriate, indicate any commitments to mitigation monitoring and maintenance, including goals and managers of proposed adaptive management mitigation.

We appreciate the opportunity to review this document. If you have any questions, or wish to discuss our comments further, please contact me or Norm West of my staff at (312)-353-5692 or at [west.norman@epa.gov](mailto:west.norman@epa.gov).

Sincerely,



for, Kenneth A. Westlake  
Chief, NEPA Implementation Section  
Office of Enforcement and Compliance Assurance

Cc: Eric S. Therkildsen, IDOT

## **SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION\***

### **Environmental Impact of the Action**

#### LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

#### EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

#### EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

#### EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS state, this proposal will be recommended for referral to the CEQ.

### **Adequacy of the Impact Statement**

#### Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

#### Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

#### Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

## **Concerns Regarding the DEIS Proposed Project for US 30 in Whiteside County, Illinois**

### **INTRODUCTION**

The Region 5 office of U.S. Environmental Protection Agency, has reviewed the proposed Draft Environmental Impact Statement (DEIS) for US 30 from the IL 136 intersection near Fulton to the IL 40 intersection in Rock Falls, in Whiteside County, Illinois. We were involved in the project early-on in the scoping stage and developing the Purpose and Need statement for the project. When the project was withdrawn from the Illinois merged NEPA / 404 process, we had only briefly seen a large number of early alternative corridors of possible consideration.

When reading the DEIS, we note that a significant amount of the discussion supporting the P&N focuses on three conditions which do not seem to be addressed by the proposal alternatives. A key problem identified in the P&N is a segment of US 30 within Morrison which is joined by Illinois Route 78 (IL 78). Specifically, trucks moving north and south along IL 78 must negotiate several geometric tight turns and narrow roadway conditions, multiple closely spaced traffic intersections and stoplights, and a high volume of local traffic on this main street of the city. Another part of the P&N discussion indicated a robust business and commuting traffic that is generated by industries in Sterling and accesses and then leaves US 30 at several points, creating north-south "crossing-traffic" temporarily on US 30. This "crossing traffic" must deal with several safety conditions caused by roadway and intersection substandard geometry and is coincident with local high-truck-traffic areas, e.g. Wal-Mart, steel and hardware industries, landfill traffic, and others. The third P&N concern is substandard intersection geometry which creates safety issues in this area. Intersections of side roads with US 30 having intersection angles less than 75 degrees (6 intersections near Sterling - Rock Falls and 4 intersections further west) create line-of-sight problems and greater risk turning movements.

### **MORRISON and ILLINOIS 78**

The DEIS notes that safety concerns in Morrison and other locations exist due to changing road characteristics and would be resolved by providing US 30 system conformity so drivers can correctly anticipate what to expect in various circumstances. Because these corrections cannot be made along the existing US 30 in the City of Morrison, it is appropriate to realign the roadway around the city so the new alignment can be constructed consistent with recently upgraded segments of the system further west in Iowa. This would clearly avoid the geometric constraint problems in Morrison for those traveling on US 30.

However, traffic congestion within Morrison is described as due partly to north-south truck traffic on IL 78. This truck traffic apparently consists of longer tractor trailer vehicles that come into Morrison both from the south and north on IL 78. For approximately one mile, IL 78 joins US 30 in Morrison, which is the city's main street and thus carries significant local traffic. Historic development of the city along this major roadway both limits widening the street and creates multiple street changes that are inconsistent with IDOT standards. Section 3.2.2.6.1 assumes trucks will use a bypass of the city and thus the problem is solved, but the proposed

bypasses are not reasonable routes for the IL 78 trucks to follow around the city. While the proposed alternatives solve the US 30 congestion by going around the problem, it leaves Morrison with the north-south traffic problem unresolved.

The early alternative A-I (Exhibit 2-3) comes eastward from Fulton, west of Morrison, and indicates a potential intersection with IL 78 on the north. A modification of this western portion of the A-I alternative closer to the proposed alternate 4 and 5 paths could still arrive at an IL 78 northern intersection. The road then would carry US 30 along with IL 78 south along the west side of Morrison and swing eastward to intersect with IL 78 on the south side. Because this alternative did not extend east from this intersection it was dropped. If the segment of alternative A-I connecting IL 78 north to IL 78 south were to continue eastward along the alternate 5 proposed path, the Morrison by-pass would then meet the P&N. We recognize this alternative would increase some impacts, but further consideration of this concept is important to more fully meet the project P&N in this area. .

### CROSSING TRAFFIC WEST of STERLING - ROCK FALLS

Our understanding of the project P&N discussion for the eastern end of the corridor indicates the interaction of multiple traffic flows on non-uniform / non-standard roadways which include high risk geometry situations. One source of traffic in this section of US 30 comes from the interstate I-88. This traffic gets off and on I-88 at both Illinois Route 40 (IL 40) on the east side of Rock Falls and at a newly constructed "connector road" exit on the west side of Rock Falls. A significant percentage of this traffic is large trucks servicing local industries, so it gets on US 30 to move east or west a distance and then turns north (or perhaps occasionally south) to reach Rock Falls and Sterling businesses, noted above. A second flow of traffic is comprised of local businesses and residents who utilize US 30 as a local street, which its geometry indicates it is at most points in this section. A third traffic flow is comprised of a commuting population coming to and from the industries and businesses in Rock Falls and Sterling. Some of this group come from I-88 but a component of this group are arriving and departing along local country roads that come into Rock Falls and Sterling on the south and west side. They are required to make turns onto and off of US 30 to reach their destinations. The current road grid design thus causes US 30 to not only serve as an east-west arterial, but to also provide north-south crossing traffic access to their destinations by traveling a short distance (approximately 1 to 3 miles) on US 30. We recommend consideration of alternatives that addresses this truck and commuter traffic as north-south cross traffic. The current proposals do not meet the need of these cross flows and therefore does not meet the project P&N.

### NON-STANDARD INTERSECTIONS

Table 1-4 in the DEIS lists eight roads that have less than 75 degree angles of intersection with US 30. The western most intersection at Illinois Route 136 (IL 136) was not included in this list but clearly could be. Recent reconstruction described extending a turning lane but said nothing of correcting the intersection angle. Matthew Road, adjacent to the Wal-Mart Distribution Center is mentioned elsewhere in the DEIS and should probably be on this list. We further note that most of these intersections are identified as having higher volume or high truck traffic and safety concerns (Exhibits 1-5A to 1-6C). Although discussion suggests other state projects

would address some of these conditions and further studies will consider other additional intersections, this proposal does not solve these problems in a clear definitive manner. It is a reasonable expectation that a major roadway rebuilding project such as the one proposed would resolve all geometric inconsistencies of this nature in order to achieve its P&N. We recommend that by addressing the above "crossing traffic" on the west side of Sterling - Rock Falls, some of these problematic intersections, up to six (6), could be reconfigured to resolve their safety concerns.

## CONCLUSION

The solutions proposed in this DEIS represent a misunderstanding of the Context Sensitive Solutions concept (CSS). It apparently assumes that having public input bestows CSS benefits on the project. By this proposal solving the US 30 problems while sidestepping the congestion causing conditions in Morrison, the north-south traffic issues at Morrison and Sterling-Rock Falls, and the safety conditions at deficient angled intersections, the proposal bypassed CSS. As presented, the proposal has left these concerns for Whiteside County or other local authorized agencies to contend with and solve in light of the new US 30 configuration. The very nature of the new US 30 expressway configuration makes such solutions much more difficult to achieve and finance after the fact.